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abrupt cessation of coitus had enabled the patient to maintain bladder control long enough to allow urgent voluntary micturition. For one month she had also had nocturia, but without daytime frequency or dysuria. A midstream sample of urine (MSSU) and urethral swab for bacterial culture obtained by her general practitioner showed no growth. Seven months previously she had been diagnosed as having polycystic ovary syndrome. She had never been pregnant.

On examination, the only abnormal physical finding was a large pedunculated wart almost occluding the urethral meatus (fig). Investigations excluded other sexually transmitted diseases and an MSSU was negative. After repeated cryotherapy the wart disappeared, and the incontinence resolved. Six months later she remains wart-free and asymptomatic.

Urge incontinence is the involuntary voiding of urine associated with a strong desire to micturate. In the United Kingdom, urinary incontinence affects over two million people, many of them women.1 Sexual function is often impaired, and some studies have found that in approximately one quarter of incontinent women urine loss occurs during sexual intercourse.<sup>23</sup> Generally, women with stress incontinence tend to leak on penetration, whilst those with detrusor instability tend to leak at orgasm. Most affected women are parous and over 40 years old. Many have no demonstrable pathological or physiological abnormality to account for their symptoms. Our patient was unusual as she was in her teens, nulliparous, experienced no incontinence unrelated to intercourse, and had a clinically obvious pathological cause. It is likely that the irritant effects generated by the urethral wart led to failed inhibition of bladder contraction. Many women are too embarrassed to tell their doctors that they are incontinent of urine. In view of the large numbers women presenting to genitourinary medicine clinics with urethral infections in general and genital warts in particular, it is possible that the magnitude of this problem has not been appreciated.

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## Factors affecting reattendance rates at genitourinary medicine clinics

Anecdotal evidence suggests that many patients who attend departments of genitourinary medicine subsequently reattend. The factors which determine whether a patient returns with a new diagnosis are less clear. As the workload of genitourinary clinics increases it may become increasingly important to identify those at risk of subsequent infections so that they may be targeted for active health promotion, although it is unclear how successful this is. In an attempt to analyse these factors we looked at all patients who attended between January and December 1987 and subsequently reattended over a five year period between January 1989 and December 1993. Patients with HIV infection were excluded from the analysis.

Of the 5824 patients who attended the Department of Genitourinary Medicine at Edinburgh Royal Infirmary with a new diagnosis in 1987, 1107 (19%) reattended on a total of 2262 occasions between 1989 and 1993. A multivariate analysis using logistic regression analysis was performed to assess which factors were significant in patients who reattended with a diagnosis of gonorrhoea or chlamydia or non-specific urethritis (NSU). Gonorrhoea was diagnosed as has been described previously and a diagnosis of chlamydia/NSU was made on the basis of positive cell culture from endocervical swabs in women and from the detection of greater than 10 pus cells per high power field on a Gram stained urethral smear in men, where gonorrhoea had been excluded by culture. The results of the analysis are shown in the table. Of the 15 patients who reattended with a diagnosis of gonorrhoea following a negative HIV test in 1987 five (33%) had rectal infection, compared with two (9%) out of 23 patients with gonorrhoea who had not been HIV tested when seen in 1987.

Reattendance with gonorrhoea was associated with social class and sexual orientation of the patient with an increased rate of infection in social classes 4 and 5, and in homosexual patients. Chlamydial infection or NSU were

Logistic regression analysis of variables related to reattendance with gonorrhoea or chlamydia/NSU

Variable		Reattendance with gonorrhoea	p value	Reattendance with chlamydia/ NSU	p value	Total
Negative HIV	Yes	15 (3·3%)	0.57	50 (11%)	0.6	452
Test in 1987	Not tested	23 (1·3%)		314 (17%)		1810
Age group	under 16	0		0		1
	16–20	0		13 (28%)		46
	21-25	17 (2·8%)		112 (18%)		603
	26-30	12 (1·7%)	0.26	103 (15%)	< 0.01	687
	31–35	7 (1.6%)		80 (18%)		434
	<b>36–4</b> 0	0		32 (15%)		217
	over 40	2 (0.7%)		24 (8.8%)		274
Social class	1	0		5 (15%)		32
	2 3 4 5	2 (0.8%)		32 (12%)		264
	3	19 (1.7%)	0.02	190 (17%)	0.78	1104
	4	4 (3.1%)		23 (17%)		131
	5	3 (9.1%)		10 (30%)		33
	unknown	10 (1.4%)		104 (15%)		698
Location acquired	Lothian	21 (1.5%)		242 (17%)		1397
	Scotland	5 (6·2%)	0.08	24 (30%)	0.003	81
	Other	5 (4.9%)		32 (31%)		102
	Unknown	7 (1%)		66 (9.7%)		682
Sex	Male	34 (2.1%)	0.71	338 (21%)	< 0.01	1630
	Female	4 (0.6%)		26 (4%)		632
Sexual	Heterosexual	15 (0.8%)		337 (18%)		1845
orientation	Homosexual	22 (5.5%)	< 0.01	27 (6.7%)	< 0.01	403
	Bisexual	1 (7%)	301	0	3 0 2	14

associated with a younger age group, acquisition of infection outside Lothian, being male and heterosexual orientation.

Many patients who attend GU clinics receive some form of health education or promotion yet despite this many return with STDs which would indicate that they have not followed the advice given. HIV testing was always accompanied by counselling before and after testing, encouraging safer sexual behaviour, yet there was no significant difference in the rates of gonorrhoea or chlamydia in those who had been HIV tested and those who had not. Although this may reflect initial differences in behaviour in the "tested" and "not tested" groups it implies that HIV testing per se does not produce a low risk population for the subsequent acquisition of STDs. Others have also found a high rate of STDs in those who reattend after HIV testing.<sup>2</sup> Since health education often requires repetition to induce change<sup>3</sup> the one or two

counselling sessions associated with an HIV test may not be effective.

Genitourinary clinics have a high rate of patient reattendance with STDs despite the promotion of low risk sexual behaviour. Certain subgroups of patients can be identified and may benefit from targeted health promotion.

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## Trichomonas vaginalis transmission in a family

Vaginal trichomoniasis is one of the common female sexually transmitted diseases. Non sexual transmission in adults has been reported. The organism can survive on fomites for periods up to 24 hours. Perinatal transmission has been reported by Bramley. A case of T. vaginalis transmission from a mother to two siblings and possibly a third is reported.

A 35 year old woman noticed a yellowish vaginal discharge from two of her children, A and B (aged 3 and  $4\frac{1}{2}$  years respectively). Her eldest daughter C (7 years) had complained of a vaginal discharge with itching the previous day. The mother had received treatment for a vaginal discharge (which still persisted) at the local Health Post 2 weeks previously. She supervised the children personally at home and denied the possibility of sexual abuse on

the children. B and C who could communicate verbally also denied sexual abuse at separate interviews. The family including the husband, used the same bathing towel and sponge. All the children had an intact hymen on vaginal examination. Yellowish discharges could be seen in their vaginal vestibules.

Wet film microscopy of discharges from the mother (taken from the posterior fornix) and the vaginal vestibules of two daughters (A and C) showed active trichomonas vaginalis. This was negative for B on three repeated examinations done a week apart. Culture for T. vaginalis was not done. Smears and cultures for gonorrhoea, and candida was also negative. Chlamydia ELISA was negative. A diagnosis of trichomonas vaginitis was made for the mother, A and C. Two sets of tests of cure taken a week and 4 weeks after treatment were negative for all STDs. The only sexual partner of the woman (her husband) was